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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,682	02/12/2001	Robert F. Kovar	48997 (70184)	6125
21874	7590	08/23/2004	EXAMINER	
EDWARDS & ANGELL, LLP			MCCLENDON, SANZA L	
P.O. BOX 55874			ART UNIT	
BOSTON, MA 02205			PAPER NUMBER	

1711

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/781,682

Applicant(s)

KOVAR ET AL.

Examiner

Sanza L McClendon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-42 and 44-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-42, and 44-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Response to Amendment*

1. In response to the Amendment received on May 19, 2004, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 14 and 43. The amendment to the claims includes negative limitations, which do not appear in the specification as filed, that introduces new concepts and violates the description requirements of the first paragraph of 35 USC 112.

### *Response to Arguments*

1. Applicant's arguments filed May 19, 2004 have been fully considered but they are not persuasive. Applicant's amendment to claims 1 and 54 introduces negative limitation, which do not appear in the specification as filed. It is noted that applicant's disclosure does not expressly disclose the use of thiol compound, however at the same time applicant's disclosure does not expressly exclude the use of thiols. The introduction of the negative limitation (free from thiols) violates the description requirements of 35 USC 112 and will be rejected under 35 USC 112, first paragraph. It is noted that applicant believes that the Schmidle et al patents are distinguished from the instant invention because of applications amendment attempting to exclude thiol compounds, therefore combination of Schmidle et al and Kovar under 35 USC 103(a) has been withdrawn, however the amendment will be reinstated, if warranted, once applicant has corrected 35 USC 112 rejection—see below. In addition a new rejection will be applied which was necessitated by amendment, which can be found below.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:  
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly

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connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-13, 15-42, 44-57, 59-74 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation " wherein the composition is free of thiols" is not described by applicant' s disclosure of the invention. While examiner concedes that applicant has not expressly disclosed the use of thiols in the written description of the invention, applicant has not expressly excluded the use of thiols in such as way that an artisan of ordinary skill in the art would know not to use such compounds in the making/using the composition. Therefore claims 1 and 54 have violated the description requirement under 35 USC 112. Appropriate action is required.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7, 20-21, 24-25, 27-33, 35-36, 46, 54, 56-58, 66-69, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovar et al (5,977,269) in view of Schmidle et al (4,182,848).

Kovar et al teaches polyester, vinyl dioxolane based coating compositions that are VOC

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free and sprayable onto substrates and cured. Said composition comprises (a) at least one prepolymer that is the reaction product of (I) at least one substituted vinyl dioxolane of formula I and (ii) at least one ester of a polycarboxylic acid; and (b) a catalyst system to initiate the prepolymer reaction of (a). Said catalyst system comprises a cobalt/aluminium/zinc system. Said composition further comprises peroxide (such as, dibenzoyl peroxide and MEK peroxide) and a solubility enhancer. The peroxide is added in amounts from 0.10 to 5 weight percent and said enhancer from 0.01 to 1.0 weight percent. This appears to read on claims 68-69 and 71. The vinyl dioxolanes can include compounds of formula I, such as HMVD and HBVD found in column 10, line 68. This appears to read on claims 21 and 57. The esters of polycarboxylic acids can be found in column 11, lines 27-35, dimethyl 1,4-cyclohexanedicarboxylate. This reads on claims 6-7 and 67. The composition can comprise a reactive diluent to adjust the viscosity of the composition to make it sprayable. This appears to read on claim 27. Said reactive diluents can have vinyl dioxolane groups or compounds such as trimethylolpropane triacrylate can be used in amounts from 1 to about 50-wt%--see column 5, lines 40-45. This appears to read on claims 28-29 and 31-33. Said coating composition has a viscosity from about 10 to about 15. mPa\*s. Further still, the composition can comprise pigments, such as metal oxides--see column 14, lines 15-18. Said pigment reads on claims 35-36. Additionally other additives, such as surface acting agents can be added. This reads on the wetting agents of claim 46. Kovar et al does not expressly teach the use of photoinitiators in the composition.

Schmidle et al teaches photocurable compositions comprising a polyene derived from vinyl-1,3-dioxolane or vinyl-1,3-dioxane or has the formula as found in column 1, lines 55-60. In addition to the vinyl dioxolane, the compositions can further comprise a U.V. initiator, such as benzophenone, benzoin, and the like, an antioxidant, and a flow control agent. The benzophenone per example 5 is used in amounts from 1.5 parts by weight, wherein the examiner deems that 1.5 reads on applicant's "about 2.0" in claims 24-25.

Kovar et al and Schmidle et al are analogous art because they are from the same field of endeavor that is polyester/vinyl dioxolane coating compositions.

Therefore, it would have been obvious for a skilled artisan to use a photoinitiator as suggested by Schmidle et al in compositions as taught by Kovar et al. The motivation would have been a reasonable expectation of obtaining a faster cure time in the absence of evidence

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and/or unexpected results to the contrary. The combination of references appears to anticipate claims 1-6, 20, 30, 54, and 56, 58, 66.

*Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sanza L McClendon

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